



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,109	12/13/2001	Martin H. Beck	DEVTEC P25AUS	2482
20210	7590	01/30/2004	EXAMINER	
DAVIS & BUJOLD, P.L.L.C. FOURTH FLOOR 500 N. COMMERCIAL STREET MANCHESTER, NH 03101-1151			POE, MICHAEL I	
			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,109

Applicant(s)

BECK ET AL.

Examiner

Michael I Poe

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 10 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 20011213.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 1732

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, drawn to a method of preventing delamination of multiple layers of at least one polymer container, classified in class 264, subclass 162.
- II. Claims 10 and 11, drawn to a multilayered container, classified in class 215, subclass 379.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions of Group I and Group II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as a process wherein the entire container is softened by heating prior to curling the perimeter of the container.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with applicant's attorney Mike Bujold on January 15, 2004, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-9. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10 and 11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 1732

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-4 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,062,408; claim 1 of U.S. Patent No. 6,126,886; or claim 1 of U.S. Patent No. 6,237,791 B1 in view of Japanese Patent Publication No. 02-085177 A (Isamu et al.).

Claims 1-4

The claims of U.S. Patent Nos. 6,062,408; 6,126,886 and 6,237,791 B1 teach a method of forming a blow molded biaxially oriented thermoplastic containers comprising stretch blow molding an intermediate article from a preform; removing the article from the mold; severing an accommodation element from the article to produce a biaxially oriented container (the container has been trimmed, from an intermediate blow molded article); heating the material of the container adjacent the mouth (perimeter) until workable; and post forming the material adjacent the open mouth to form a curled perimeter defining the open mouth (having an opening) by rolling (providing a curling device; using the device to curl said

Art Unit: 1732

perimeter) (claim 1 of U.S. Patent No. 6,062,408; claim 1 of U.S. Patent No. 6,126,886 and claim 1 of U.S. Patent No. 6,237,791 B1).

The claims of U.S. Patent Nos. 6,062,408; 6,126,886 and 6,237,791 B1 do not specifically teach that the container has multiple layers that are at least partially exposed or totally exposed; that the curl subtends at least 180° or 270° ; and that the curl is sufficient to inhibit delamination of the layers. However, Isamu et al. teach a food packaging container (at least one polymer container) including a container main body 1 and a collar part 3 (having an opening defined by the multiple layers) comprising a first layer 4 of a high density polyethylene, a second layer 5 of polypropylene and a third layer 8 of aluminum foil wherein the collar part is provided with a rolled edge 7 at the tip with each of the layers being total exposed (an opening defined by a perimeter at which the multiple layers are at least partially exposed; the multiple layers are totally exposed) (JPO abstract and Figures). As illustrated in Figure 1, the rolled edge 7 of the container subtends approximately 270° (the curl subtends at least about 180° ; the curl subtends at least about 270°). With regard to the aspect of the curl being sufficient to inhibit delamination of the layers, the examiner stipulates one of ordinary skill in the art would have recognized that curling of the edges of the container in Isamu et al. such that they subtend about 270° would inherently inhibit delamination of the layers by protecting the ends of the layers and by forming a mechanical interlock at the edges of the container. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made and one of ordinary skill would have been motivated to use the processes of the claims of U.S. Patent Nos. 6,062,408; 6,126,886 and 6,237,791 B1 to provide curl to the edges of a multilayer container as taught in Isamu et al. to provide a container having enhanced barrier properties.

8. Claims 1, 3-5 and 7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,062,408; claim 1 of U.S. Patent No. 6,126,886; or claim 1 of U.S. Patent No. 6,237,791 B1 in view of U.S. Patent No. 5,181,615 (Thompson).

Claims 1, 3-5 and 7

The claims of U.S. Patent Nos. 6,062,408; 6,126,886 and 6,237,791 B1 teach a method of forming a blow molded biaxially oriented thermoplastic container comprising stretch blow molding an intermediate article from a preform; removing the article from the mold; severing an accommodation

Art Unit: 1732

element from the article to produce a biaxially oriented container (the container has been trimmed, from an intermediate blow molded article); heating the material of the container adjacent the mouth (perimeter) until workable; and post forming the material adjacent the open mouth to form a curled perimeter defining the open mouth (having an opening) by rolling (providing a curling device; using the device to curl said perimeter) (claim 1 of U.S. Patent Nos. 6,062,408; 6,126,886 and 6,237,791 B1).

The claims of U.S. Patent Nos. 6,062,408; 6,126,886 and 6,237,791 B1 do not specifically teach that the container has multiple layers that are at least partially exposed; that the curl subtends at least 180° or 270° or 360° ; that the curl is sufficient to inhibit delamination of the layers and that the multiple layers are formed by separate nested containers. However, Thompson teaches a method of bonding a plastic end portion to a plastic container or can including inserting a can end into the open end of a can body so that the periphery of its lid portion abuts the inwardly projecting locating means of the can body and so that the plastic free end of the can end extends upwardly in juxtaposition to the plastic free end of the can body thereby forming a double wall (the multiple layers are formed by separate nested containers); heating the free ends forming the double wall to soften the free ends (heating said perimeter until workable); and sealing and joining the free ends by a die curling tool which preferably engages the breadth or periphery of the free ends in a vertical compression at the same time and concurrently turns them inwardly or outwardly and then downwardly thereby channeling and altering the direction of such movement over its working surfaces occurs (providing a curling device; using said device to curl said perimeter) (column 3, lines 31-57; column 7, lines 17-35). Thompson further teaches that the container body and/or end may also include composite constructions including paper, metal films (e.g., a barrier layer) or other materials which are used at low enough levels so that the curl formability of the free ends is sufficient to produce the curled seams (at least one polymer container having an opening defined by the multiple layers; an opening defined by a perimeter at which the multiple layers are at least partially exposed) (column 8, lines 19-24). As illustrated in Figures 3 and 4, Thompson further teaches that the free ends subtend about 360° (the curl subtends at least about 180° ; the curl subtends at least about 270° ; the curl subtends at least about 360°). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made and one of ordinary skill would have been motivated to seal and join a container closure with a nested container using the curling processes of the claims of U.S.

Art Unit: 1732

Patent Nos. 6,062,408; 6,126,886 and 6,237,791 B1 as taught by Thompson to provide a method of joining containers with closures or ends at high rates (see specifically column 4, lines 49-60 of Thompson).

9. Claims 6, 8 and 9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,062,408; claim 1 of U.S. Patent No. 6,126,886; or claim 1 of U.S. Patent No. 6,237,791 B1 in view of [either Japanese Patent Publication No. 02-085177 A (Isamu et al.) or U.S. Patent No. 5,181,615 (Thompson)] and U.S. Patent No. 5,246,753 (Koyama et al.).

Claims 6, 8 and 9

The discussion of the claims of U.S. Patent Nos. 6,062,408; 6,126,886 and 6,237,791 B1, Isamu et al. and Thompson as applied to claim 1 above applies herein.

With regard to claims 6, 8 and 9; the claims of U.S. Patent Nos. 6,062,408; 6,126,886 and 6,237,791 B1 in view of Isamu et al. or Thompson do not specifically teach that barrier layer is located between the inner and outer walls of the container. However, Koyama et al. teach a plastic multilayer vessel comprising a laminated structure including an intermediate layer of a resin composition formed by incorporating an organic metal complex of a transition metal into a gas-barrier resin (at least one barrier layer extending throughout the container) and outer and inner layers of a moisture-resistant thermoplastic resin (at least inner and outer walls) disposed on both sides of the intermediate layer (separated by at least one barrier layer extending throughout the container) (column 2, lines 59-68). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made and one of ordinary skill would have been motivated to form the container of a laminate having a barrier layer between inner and outer layers in the process of the claims of U.S. Patent Nos. 6,062,408; 6,126,886 and 6,237,791 B1 in view of Isamu et al. or Thompson as taught by Koyama et al. to provide a plastic multilayer container having an excellent oxygen permeation resistance at the heat sterilization and with the lapse of time after the heat sterilization (see specifically column 1, lines 6-12 of Koyama et al.).

With regard to claims 8 and 9, one of ordinary skill in the art would have recognized that the severing step in the process of the claims of U.S. Patent Nos. 6,062,408; 6,126,886 and 6,237,791 B1 in view of Isamu et al. or Thompson would obviously require the container to be trimmed through the at least

Art Unit: 1732

one barrier layer to form the opening because the barrier layer extends throughout the entire container.

Further, since the trimmed end of curled portion in the process of the claims of U.S. Patent Nos.

6,062,408; 6,126,886 and 6,237,791 B1 in view of Isamu et al. or Thompson would subtend at least about 270°, the trimmed end would obviously be protected from the surrounding environment as claimed.

10. Claims 1-9 are directed to an invention not patentably distinct from claim 1 of commonly assigned U.S. Patent No. 6,062,408; claim 1 of commonly assigned U.S. Patent No. 6,126,886; or claim 1 of U.S. commonly assigned U.S. Patent No. 6,237,791 B1. Specifically, claims 1-9 are not patentably distinct for the reasons set forth above in the obviousness-type double patenting rejections.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned U.S. Patent Nos. 6,062,408, U.S. Patent No. 6,126,886 and U.S. Patent No. 6,237,791 B1, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee is required under 35 U.S.C. 103(c) and 37 CFR 1.78(c) to either show that the conflicting inventions were commonly owned at the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. Failure to comply with this requirement will result in a holding of abandonment of the application.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

Claim Objections

11. Claims 1-9 are objected to because of the following informalities: "a" should be "an" before "opening" in line 4 of claim 1. Appropriate correction is required.

Art Unit: 1732

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 is generally confusing because it appears to be missing word(s). Specifically, it appears that the phrase "the opening has a trimmed edge forming the perimeter comprising using said device to curl" is missing word(s) between "perimeter" and "comprising". For the purpose of this Office action, the examiner has assumed that the above mention phrase reads: "the opening has a trimmed edge forming the perimeter, the step of using said device to curl the perimeter further comprising curling the perimeter to an extent that the trimmed edge is not exposed to the environment".

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,181,615 (Thompson) in view of Japanese Patent Publication No. 02-085177 A (Isamu et al.).

Claims 1-5 and 7

Thompson teaches a method of bonding an end portion to a container or can including inserting a can end into the open end of a can body so that the periphery of its lid portion abuts the inwardly projecting locating means of the can body and so that the plastic free end of the can end extends upwardly in juxtaposition to the plastic free end of the can body thereby forming a double wall (providing said container having an opening defined by a perimeter; the multiple layers are formed by separate nested containers); heating the free ends forming the double wall to soften the free ends (heating said

Art Unit: 1732

perimeter until workable); and sealing and joining the free ends by a die curling tool which preferably engages the breadth or periphery of the free ends in a vertical compression at the same time and concurrently turns them inwardly or outwardly and then downwardly thereby channeling and altering the direction of such movement over its working surfaces (providing a curling device; using said device to curl said perimeter) (column 3, lines 31-57; column 7, lines 17-35). Thompson further teaches that the container body and/or end may also include composite constructions including paper, metal films (e.g., a barrier layer) or other materials which are used at low enough levels so that the curl formability of the free ends is sufficient to produce the curled seams (at least one polymer container) (column 8, lines 19-24). As illustrated in Figures 3 and 4, Thompson further teaches that the free ends subtend about 360° (the curl subtends at least about 180° ; the curl subtends at least about 270° ; the curl subtends at least about 360°). With regard to the aspect of the curl being sufficient to inhibit delamination of the layers, the examiner stipulates one of ordinary skill in the art would have recognized that curling of the edges of the container in Thompson would inherently inhibit delamination of the layers by protecting the ends of the layers and by forming a mechanical interlock at the edges of the container.

Thompson does not specifically teach that the multiple layers are at least partially exposed or are totally exposed. However, Isamu et al. teach a food packaging container (at least one polymer container) including a container main body 1 and a collar part 3 (an opening defined by the multiple layers) comprising a first layer 4 of a high density polyethylene, a second layer 5 of polypropylene and a third layer 8 of aluminum foil wherein the collar part is provided with a rolled edge 7 at the tip with each of the layers being total exposed (an opening defined by a perimeter at which the multiple layers are at least partially exposed; the multiple layers are totally exposed) (JPO abstract and Figures). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made and one of ordinary skill would have been motivated to provide a container having multiple layers that were at least partially or totally exposed in the process of Thompson as taught by Isamu et al. to provide a container that required no sealing of the edges after trimming and prior to the curling operation.

16. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,856,667 (Thompson #2) in view of Japanese Patent Publication No. 02-085177 A (Isamu et al.).

Art Unit: 1732

Claims 1-5

Thompson #2 teaches a method for making containers having consistent levels of sealing performance by forming a curled portion on the neck sealing portion of a container including forming a container having a neck 10, with a vertical cylindrical or tubular wall 23 having its lower end 21 integral with the neck top wall 16 and with its upper free end 25 ready for curling, by injection, compression or blow molding (providing said container having an opening defined by a perimeter); and pressing the groove 28 of a heated tool 26 (heating said perimeter until workable) against the rim 27 of the wall 23 such that the cylindrical sides of the wall 23 are centered within the groove 28 by the slanted portions 39 and are then forced inwardly or outwardly and then downwardly to assume the desired curved shape (providing a curling device; using said device to curl said perimeter) having a cross section of from about 90 to 360 degrees (the curl subtends at least about 180°; the curl subtends at least about 270°; the curl subtends at least about 360°) (column 4, lines 3-53). Thompson #2 further teaches that the containers are formed of plastic material and may include combinations with other materials such as metals (at least one polymer container having an opening defined by the multiple layers) (column 3, lines 34-53). With regard to the aspect of the curl being sufficient to inhibit delamination of the layers, the examiner stipulates one of ordinary skill in the art would have recognized that curling of the edges of the container in Thompson #2 would inherently inhibit delamination of the layers by protecting the ends of the layers and by forming a mechanical interlock at the edges of the container.

Thompson #2 does not specifically teach that the multiple layers are at least partially exposed or are totally exposed. However, Isamu et al. teach a food packaging container (at least one polymer container) including a container main body 1 and a collar part 3 (an opening defined by the multiple layers) comprising a first layer 4 of a high density polyethylene, a second layer 5 of polypropylene and a third layer 8 of aluminum foil wherein the collar part is provided with a rolled edge 7 at the tip with each of the layers being total exposed (an opening defined by a perimeter at which the multiple layers are at least partially exposed; the multiple layers are totally exposed) (JPO abstract and Figures). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made and one of ordinary skill would have been motivated to provide a container having multiple layers that were at least

Art Unit: 1732

partially or totally exposed in the process of Thompson #2 as taught by Isamu et al. to provide a container that required no sealing of the edges after trimming and prior to the curling operation.

17. Claims 6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over [either U.S. Patent No. 5,181,615 (Thompson) or U.S. Patent No. 4,856,667 (Thompson #2)] in view of Japanese Patent Publication No. 02-085177 A (Isamu et al.) and U.S. Patent No. 5,246,753 (Koyama et al.).

Claims 6, 8 and 9

The discussion of Thompson, Thompson #2 and Isamu et al. as applied to claim 1 above applies herein.

Thompson in view of Isamu et al. and Thompson #2 in view of Isamu et al. do not specifically teach a multilayer structure having a barrier layer that is located between the inner and outer walls of the container; that the container has been trimmed, from an intermediate blow molded article, through the at least one barrier layer to form the opening; and using the device to curl the perimeter to an extent that the trimmed edge is not exposed to the environment. However, Koyama et al. teach a method of forming a plastic multilayer vessel comprising a laminated structure including an intermediate layer of a resin composition formed by incorporating an organic metal complex of a transition metal into a gas-barrier resin (at least one barrier layer extending throughout the container) and outer and inner layers of a moisture-resistant thermoplastic resin (at least inner and outer walls) disposed on both sides of the intermediate layer (separated by at least one barrier layer extending throughout the container) including co-injecting or sequentially injecting melts corresponding to the respective layers into an injection mold to form a multilayer preform and blow molding the multilayer preform to form a bottle (the container has been trimmed, from an intermediate blow molded article, through at least one barrier layer to form the opening) (column 2, lines 59-68; column 7, lines 26-53). Note that one of ordinary skill in the art would have obviously recognized that the step of blow molding the multilayer preform in the process of Koyama et al. was inclusive of a trimming step to form an opening. However, even if one of ordinary skill in the art would not have recognized that the step of blow molding the multilayer preform was inclusive of a trimming step to form an opening, the examiner takes official notice that it was well known in the art to trim blow molded intermediates to form openings as claimed in claim 8. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made and one of ordinary skill

Art Unit: 1732

would have been motivated to form the container by blow molding of a laminate having a barrier layer between inner and outer layers in the processes of (either Thompson or Thompson #2) in view of Isamu et al. to provide a plastic multilayer container having an excellent oxygen permeation resistance at the heat sterilization and with the lapse of time after the heat sterilization (see specifically column 1, lines 6-12 of Koyama et al.).

With regard to claim 9, as noted above, Thompson and Thompson #2 teach that the free ends subtend about 360° . Therefore, the trimmed edge in the processes of (either Thompson or Thompson #2) in view of Isamu et al. and Koyama et al. would obviously not be exposed to the environment and would be protected therefrom.


Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 2,859,575 (Lehmann), U.S. Patent No. 3,355,536 (Midgley et al.), U.S. Patent No. 4,281,979 (Doherty et al.), U.S. Patent No. 4,982,872 (Avery), U.S. Patent No. 5,049,019 (Franek et al.), U.S. Patent No. 5,431,619 (Bacon et al.), U.S. Patent No. 5,523,042 (Clements) and U.S. Patent No. 5,674,448 (Slat et al.) have been cited of interest to show the state of the art at the time the invention was made.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael I Poe whose telephone number is (571) 272-1207. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.


Michael Poe/mip


MICHAEL COLAIANNI
PRIMARY EXAMINER